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# NOTICE OF ALLOWANCE AND FEE(S) DUE

25944 7590 12/04/2009

OLIFF & BERRIDGE, PLC P.O. BOX 320850

ALEXANDRIA, VA 22320-4850

EXAMINER MILLER, MICHAEL G

ART UNIT PAPER NUMBER

1792 DATE MAILED: 12/04/2009

 APPLICATION NO.
 FILING DATE
 FIRST NAMED INVENTOR
 ATTORNEY DOCKIET NO.
 CONFREMATION NO.

 10/689,100
 10/21/2003
 Mark H. Shipton
 117396
 3816

TITLE OF INVENTION: METHOD OF FORMING A DIFFUSION BARRIER ON A TITANIUM ALLOY SUBSTRATE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	03/04/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT, PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

# Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where

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							(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	Ī	ATTOR	NEY DOCKET NO.	CONFIRMATION NO.
10/689,100	10/21/2003	•	Mark H. Shipton	•	117396		3816
			RIER ON A TITANIUM				_
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	03/04/2010
EXAM	IINER	ART UNIT	CLASS-SUBCLASS				
MILLER, M	IICHAEL G	1792	427-376400				
1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).  ☐ Change of correspondence address (or Change of Correspondence Address form PTOSB/122) attached. ☐ "Fee Address" indication (or "Fee Address" Indication form PTOSB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			2. For printing on the patent front page, list (1) the annes of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agent. If no name is sitted, no name with per printed.				
PLEASE NOTE: Uni recordation as set fort (A) NAME OF ASSI	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee eletion of this form is NO	(B) RESIDENCE: (CITY	atent. If an assigne assignment. and STATE OR Co	OUNTR	Y)	ocument has been filed for
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Advance Order -	# of Copies		The Director is hereby overpayment, to Depo	authorized to charg sit Account Number	ge the re	quired fee(s), any det enclose au	ficiency, or credit any n extra copy of this form).
5. Change in Entity Sta	tus (from status indicate is SMALL ENTITY statu		b. Applicant is no long	ger claiming SMAL	LENTI	TY status. Sec 37 CF	R 1.27(g)(2).
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepted tes Patent and Trademark	d from anyone other than to Office.	he applicant; a regis	tered att	orney or agent; or th	e assignee or other party in
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PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.



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10/689,100	10/21/2003	Mark H. Shipton	117396 3816			
25944 75	90 12/04/2009		EXAMINER			
OLIFF & BERRIDGE, PLC			MILLER, MICHAEL G			
P.O. BOX 320850		ART UNIT	PAPER NUMBER			
ALEXANDRIA, V	'A 22320-4850	1792				

DATE MAILED: 12/04/2009

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 965 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 965 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

### Application No. Applicant(s) 10/689,100 SHIPTON ET AL. Notice of Allowability Examiner Art Unit MICHAEL G MILLER 1792 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the response filed 16 SEP 2009. 2. The allowed claim(s) is/are 1-12 and 23. 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) ☐ Some\* c) ☐ None of the: a) 🔯 All 1. A Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). \* Certified copies not received: \_\_\_\_\_. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. | Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). 7. Examiner's Amendment/Comment Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit 8. X Examiner's Statement of Reasons for Allowance of Biological Material 9. ☐ Other .

/Michael G. Miller/ Examiner. Art Unit 1792 Application/Control Number: 10/689,100 Page 2

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#### DETAILED ACTION

### Response to Amendment

 The declaration under 37 CFR 1.132 filed 16 SEP 2009 is sufficient to overcome the rejection of claims 1-12 and 23 based upon the arguments presented 16 SEP 2009.

#### Response to Arguments

- Applicant's arguments, see below, filed 16 SEP 2009, with respect to Claims 1-12 and 23 have been fully considered and are persuasive. The rejections of said claims have been withdrawn.
- 3. Applicant's first argument is that it would not have been obvious to combine the teachings of Klotz and Bomberger as those in the art would not have believed them to be applicable to each other. Applicant's further showings indicate that titanium does not corrode in seawater at normal temperatures, which the coating of Klotz is meant to inhibit. Further, Applicant shows that the teachings of Troczynski indicate that the teachings of Bomberger are of a high enough temperature that they would damage the substrate of Klotz, which would mean that significant testing would be required and therefore that the combination would not be obvious. Examiner agrees.

# Allowable Subject Matter

- Claims 1-12 and 23 are allowed.
- 5. As discussed above, Klotz teaches a method of forming an anti-corrosion coating on a magnesium substrate or other such metals that corrode by salt spray, while Bomberger teaches that applying anti-corrosion coatings to titanium substrates to prevent them from corrosion by salt spray is desirable. However, Applicant has shown

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that the methods of Bomberger would damage the substrate of Klotz, and further that the base metals are different enough that a coating that protects magnesium at standard temperatures cannot be expected to similarly protect titanium at elevated temperatures without significant testing. The other references cited do nothing to overcome this deficiency.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL G. MILLER whose telephone number is (571)270-1861. The examiner can normally be reached on M-F 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Cleveland can be reached on (571) 272-1418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Michael G. Miller/ Examiner, Art Unit 1792

/Timothy H Meeks/ Supervisory Patent Examiner, Art Unit 1792